Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for controlling velocity of a model vehicle, the method comprising:

providing a control wheel configured to rotate within a range of positions;

determining a speed of rotation of the control wheel <u>by a user</u> over a period of about 50 milliseconds or less;

correlating the magnitude of power provided to the model vehicle with a speed of rotation of the wheel.

2. (Original) The method of claim 1 wherein correlating the magnitude of power with a speed of rotation comprises multiplying a distance of rotation of the wheel by a factor determined from a time of wheel rotation.

3. (Original) The method of claim 2 wherein the distance of wheel rotation is multiplied by the factor when the speed of wheel rotation exceeds 200 ms/rotation.

4. (Original) The method of claim 2 wherein a value of the factor is proportional to the rotational speed of the wheel.

5. (Original) The method of claim 1 wherein correlating the magnitude of power provided to the model vehicle comprises generating an electrical pulse based upon rotation of the wheel by an increment of angular distance.

6. (Original) The method of claim 5 wherein the electrical pulse is generated by an optical detector receiving light transmitted through a gap of rotatable disk in mechanical communication with the wheel.

7. (Original) The method of claim 5 wherein the electrical pulse is generated by an optical detector receiving light reflected by a strip located of a rotatable disk in mechanical communication with the wheel.

8. (Original) The method of claim 5 wherein the electrical pulse is generated by a magnetic detector positioned in proximity to a magnetic element of a rotatable disk in mechanical communication with the wheel.

9. (Original) The method of claim 1 further comprising controlling a polarity of change in the velocity of the model vehicle based upon a phase difference between voltage signals output by optical detectors positioned at different locations along a disk rotational path.

10. (Original) The method of claim 1 wherein correlating the magnitude of power provided to a model vehicle comprises correlating the magnitude of power provided to a rail of a model train set.

11. (Original) The method of claim 1 wherein correlating the magnitude of power provided to a model vehicle comprises correlating the magnitude of power provided to a remotely controlled toy selected from the group consisting of a train, a car, and a plane.

12. (Currently amended) An apparatus for providing power to a model vehicle, the apparatus comprising:

a control [[wheel rotatable]] <u>knob configured to be rotated by a user</u> over a range of positions;

a sensing element in communication with the control [[wheel]] <u>knob</u> and configured to detect a speed of rotation of the [[wheel]] <u>knob</u> over a period of about 50 milliseconds or less; and

a processor in electrical communication with the sensing element, the processor configured to correlate [[wheel]] <u>knob</u> rotational speed with a magnitude of power provided from a source to a model vehicle.

13. (Currently Amended) The apparatus of claim 12 wherein the processor is configured to multiply a distance of rotation of the [[wheel]] knob by a factor based upon speed of knob rotation.

14. (Currently Amended) The apparatus of claim [[12]] 13 wherein the processor is configured to generate the factor proportional to the speed of knob rotation.

15. (Original) The apparatus of claim 12 wherein the sensing element comprises an optical detector, and the apparatus further comprises:

a light source; and

a rotatable disk intervening between the light source and the optical detector, the rotatable disk communication with the knob and including gaps spaced at regular angular increments to allow optical communication between the light source and the detector, wherein the processor is configured to detect knob rotation speed based upon a rate of changed transmission of light.

16. (Original) The apparatus of claim 15 wherein the sensing element further comprises a second optical detector positioned at a different location along a rotational range of the disk, the processor further configured to detect a direction of knob rotation based upon a phase difference between electrical signals produced from the first and second optical detectors.

17. (Original) The apparatus of claim 12 wherein the sensing element comprises an optical detector, and the apparatus further comprises:

a light source; and

a rotatable disk intervening between the light source and the optical detector, the rotatable disk communication with the knob and including reflecting elements spaced at regular angular increments to allow optical communication between the light source and the detector, wherein the processor is configured to detect knob rotation speed based upon a rate of changed reflection of light.

18. (Original) The apparatus of claim 17 wherein the sensing element further comprises a second optical detector positioned at a different location along a rotational range of the disk, the processor further configured to detect a direction of knob rotation based upon a phase difference between signals produced from the first and second optical detectors.

19. (Original) The apparatus of claim 12 further comprising an antenna configured to allow the processor to communicate with the power source through a wireless signal.

20. (Original) The apparatus of claim 12 further comprising a wired communication link between the processor and the power source.